ADDENDUM NO. 2
TO
BIDDING AND CONTRACT DOCUMENTS
HANCOCK COUNTY PORT AND HARBOR COMMISSION
STENNIS INTERNATIONAL AIRPORT

NEW HANGAR BUILDING
MDEQ-18-00036 RESTORE GRANT

TO: **ALL PLANHOLDERS**
DATE: **February 25, 2019**

This Addendum forms a part of the Bidding and Contract Documents and modifies the original documents as noted below. **Acknowledge receipt of this Addendum in the space provided in DIVISION 00 – MISCELLANEOUS DOCUMENTS, SECTION 003000 - FORM OF PROPOSAL (Page 003000- PG 2).** Failure to do so may subject a Bidder to disqualification.

This Addendum consists of Six (6) pages and attachments as listed at the end of this addendum.

RESPONSE TO CONTRACTOR QUESTIONS:

1. Addendum # 1 appears to have changed the requirement for the Roof Assembly Rating, the base bid documents call for a 0 Hour Roof Assembly Rating, reduced from 1 Hour by 1 Hour due to an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2. **Does the Roof Assembly now require a 1 Hour Rating? How is the Roof Assembly Rating to be provided?**

   Answer: IBC 2018, Table 601 (Exception "b" S-1 Occupancies) fire protection of structural members in roof construction shall not be required, including protection of primary structural frame members, roof framing and decks where every part of the roof construction is 20 feet or more above any floor immediately below.

2. Is the 1 Hour Rating to be provided with a Sheetrock Sub-ceiling (2 layers of Rated sheetrock?)?

   Answer: IBC 2018, Table 601 (Exception "b" S-1 Occupancies) fire protection of structural members in roof construction shall not be required, including protection of primary structural frame members, roof framing and decks where

every part of the roof construction is 20 feet or more above any floor immediately below.

3. A Roof Rating cannot be achieved on a Pre-Engineered Building by direct application of applied fireproofing to the purlins and painted metal deck.) The Purlins have too small a W/D ratio and the metal deck is painted, and the gauge is too light) A sub-ceiling would need to be framed, and metal lath attached, and then a fire-safing thickness if fireproofing installed to provide the Rating.

   Answer: IBC 2018, Table 601 (Exception "b" S-1 Occupancies) fire protection of structural members in roof construction shall not be required, including protection of primary structural frame members, roof framing and decks where every part of the roof construction is 20 feet or more above any floor immediately below.

4. We have noted the Fireproofing material change from Cafco 300 (Standard Density-15 PCF and 150 PSF Bond Strength) to Cafco 3000 (18 PCF Density 1000 PSF Bond Strength). This Product is made for High Rise Projects, and Concealed Fireproofing not subject to damage—for example-Exposed Columns. The Exposed Columns should be High Density Fireproofing—such as Cafco Fendolite M-II (40 PSF Density and 1000 PSF Bond Strength) or possible a Medium Fireproofing such as Cafco 400 (22 PCF Density and 430 PSF Bond Strength). -- We will bid per Documents-but the Cafco 3000 will not stand up to any abuse

   Answer: Change fireproofing to Cafco Fendolite M-II instead of Cafo 3000.

5. Clarification is being requested on what requires Spray Applied Fireproofing. The Fire-Rating can be achieved with Spray Applied Fireproofing or other means-such as sheetrock.

   Answer: Only structural frame, Table 601 for a Type IB. (Exception "b" S-1 Occupancies) fire protection of structural members in roof construction shall not be required, including protection of primary structural frame members, roof framing and decks where every part of the roof construction is 20 feet or more above any floor immediately below.

6. Need Clarification on where the Fire-Ratings were required—Is the Fire-Rating on the columns only, or the full Structural Frame/Rigid Frame

   Answer: Only structural frame, Table 601 for a Type IB. (Exception "b" S-1 Occupancies) fire protection of structural members in roof construction shall not be required, including protection of primary structural frame members, roof framing and decks where every part of the roof construction is 20 feet or more above any floor immediately below.

7. Addendum # 1 appears to change the requirement for the Roof Assembly Rating. Base Bid Documents call for a 0 Hour Roof Assembly Rating, reduced from 1 Hour by 1 Hour due to an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2
   Does the Roof Assembly now require a 1 Hour Rating?

   Answer: Only structural frame, Table 601 for a Type IB. (Exception "b" S-1 Occupancies) fire protection of structural members in roof construction shall not be required, including protection of primary structural frame members, roof framing and decks where every part of the roof construction is 20 feet or more above any floor immediately below.

8. How is the Roof Assembly Rating to be provided?

   Answer: Only structural frame, Table 601 for a Type IB. (Exception "b" S-1 Occupancies) fire protection of structural members in roof construction shall not be required, including protection of primary structural frame members, roof framing and decks where every part of the roof construction is 20 feet or more above any floor immediately below.

9. Is the 1 Hour Rating to be provided with a Sheetrock Sub-ceiling (2 layers of Rated sheetrock?)?

   Answer: Only structural frame, Table 601 for a Type IB. (Exception "b" S-1 Occupancies) fire protection of structural members in roof construction shall not be required, including protection of primary structural frame members, roof framing and decks where every part of the roof construction is 20 feet or more above any floor immediately below.

10. A Roof Rating cannot be achieved on a Pre-Engineered Building by direct application of applied fireproofing to the purlins and painted metal deck.) The Purlins have too small a W/D ratio and the metal deck is painted and the gauge is too light) A sub-ceiling would need to be framed, and metal lath attached, and then a fire-safing thickness if fireproofing installed to provide the Rating.

    Answer: Only structural frame, Table 601 for a Type IB. (Exception "b" S-1 Occupancies) fire protection of structural members in roof construction shall not be required, including protection of primary structural frame members, roof framing and decks where every part of the roof construction is 20 feet or more above any floor immediately below.

11. I want to confirm that the piles are to be displacement piles and not auger cast.

Answer: Use displacement piles.

12. The drawings indicate 16" auger cast piles throughout the documents. The specification released is for displacement piles which may preclude some of the original subs bidding the project. Before we scramble to find more subcontractors that install this pile type I wanted to make sure this was the intent.

13. Since the structure is fire proofed are we to paint as well?

Answer: Yes, not all structural elements will be protected.

14. FYI in speaking with a fire proofing subcontractor the newly specified fire proofing product would be susceptible to damage and is typically found in high rises where the columns are concealed. He recommends a Cafco Fendolite M-II (40 PSF density and 1000 PSF bond strength) or a medium fireproofing Cafco 400 (22 PCF and 430 PSF bond strength).

Answer: Change fireproofing to Cafco Fendolite M-II instead of Cafo 3000.

15. In my previous RFI's I asked the question about the additive alternate to "paint existing brick". Is there any drawings or quantities that can be provided to prepare a price to paint the brick on the existing building? Or is the option to paint the new brick on the building?

Answer: Square footage of exiting brick is approximately 8,589 SQFT. Contractors shall verify this number.

16. Addendum # 1 appears to change the requirement for the Roof Assembly Rating. The original documents call for a 0 Hour Roof Assembly Rating, reduced from 1 Hour by 1 Hour due to an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2

17. Does the Roof Assembly now require a 1 Hour Rating?

Answer: IBC 2018, Table 601 (Exception "b" S-1 Occupancies) fire protection of structural members in roof construction shall not be required, including protection of primary structural frame members, roof framing and decks where every part of the roof construction is 20 feet or more above any floor immediately below.

18. How is the Roof Assembly Rating to be provided?

Answer: IBC 2018, Table 601 (Exception "b" S-1 Occupancies) fire protection of structural members in roof construction shall not be required, including protection of primary structural frame members, roof framing and decks where every part of the roof construction is 20 feet or more above any floor immediately below.

19. Is the 1 Hour Rating to be provided with a Sheetrock Sub-ceiling (2 layers of Rated sheetrock?)?

Answer: IBC 2018, Table 601 (Exception "b" S-1 Occupancies) fire protection of structural members in roof construction shall not be required, including protection of primary structural frame members, roof framing and decks where every part of the roof construction is 20 feet or more above any floor immediately below.

20. Is the existing site fire water utility drawing available showing the underground fire line back to the existing fire pump available?

Answer: Yes

21. Is there a flow test available if fed from city water?

Answer: No

22. Is the hangar classified as a Group I hangar per NFPA 409?

Answer: Type II

23. Are additional louvers required for the HEF generators in addition to the seven louvers shown on sheet M1.01? If not, where on the building will these louvers be located?

Answer: No additional louvers will be required, but a roof cap will be required.

Plans and Drawings:

Contractor to fur out using 1 5/8-inch metal studs around the structural columns in the hangar bay and apply metal PBR panels from the finished floor to 8 foot above finish floor to protect the fire proofing material.

Miscellaneous:

Re-issued from Addendum 1 - The civil drawings are not clear on whether the existing overhead power Coast Electric Dip pole is to be relocated as part of this project. Does the existing overhead power Coast Electric Dip pole need to be relocated? Also, in front of the existing dip pole the is a fiber optic cable mark and communication quazite j-box are these required to moved? See Drawing Number: C2.01, C1.03, C3.01

Answer: Pole can remain provided there is no conflict with existing utilities.

Power Converter will need to be a 480-volt, 100-amp 3 phase circuit. 4-#3, 1-8 Gnd in 1-1/2" conduit. Circuit to panel MDP2.

SUBCONTRACTOR LISTING FORM – The lowest responsive and responsible bidder must submit this form to the Owner prior to issuance of the Notice of Award and must update it for each subcontractor performing any work resulting from this solicitation. ***The form may be duplicated if additional lines are needed.***

This concludes **Addendum No. 2** in its entirety. If you have any questions, please direct them to the Engineer, Michael Baker International, Inc, at (228) 818-2839 from the hours of 8:00 am until 5:00 pm, Monday - Friday, prior to the bid opening date of **February 28, 2019**

Questions received less than 48 hours prior to the date of the Bid opening may not be answered. Please reference "Instructions to bidders", for additional information.

ATTACHMENTS:

- *Specification Section 26 35 53 – Voltage Regulators*

NOTE: This Addendum has been transmitted to prospective Bidders and all Plan-holders via MPTAP, www.mbakerplanroom.com and e-mail

SECTION 26 35 53 - VOLTAGE REGULATORS
(TRANSIENT VOLTAGE SURGE SUPPRESSORS)

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Transient Voltage Surge Suppressors.

1.2 SUBMITTALS

A. Product Data: Capacity, dimensions, weights, details, and wiring configuration.

B. Test Reports:
1. Indicate let-through voltage test data, and spectrum analysis of each unit.
2. Test reports from nationally recognized independent testing laboratory verifying suppressors can survive published surge current rating.

C. Manufacturer's Installation Instructions: Include connection requirements.

D. Manufacturer's Certificate: Transient voltage surge suppression device complies with UL 1449 Second Edition Surge Voltage Ratings.

1.3 CLOSEOUT SUBMITTALS

A. Project Record Documents: Record actual locations of transient voltage surge suppressors.

B. Operation and Maintenance Data: Include manufacturer's descriptive literature, installation instructions, and maintenance and repair data.

1.4 QUALITY ASSURANCE

A. List individual units under UL 1449 and UL 1283.

B. Manufacturer: Company specializing in manufacturing Products specified in this Section with three years' experience.

1.5 WARRANTY

A. Furnish five year manufacturer's warranty for transient voltage surge suppressor part failure.

PART 2 PRODUCTS

2.1 TRANSIENT VOLTAGE SURGE SUPPRESSOR (TVSS)

A. Furnish materials according to UL 1449 standards.

B. Product Description: Surge protective devices for protection of AC electrical circuits.

C. Types: Service entrance switchboards, Distribution switchboards, Power panelboards Lighting panelboards.

D. Unit Operating Voltage: As indicated.

E. Maximum Continuous Operating Voltage: Greater than 115 percent of nominal system operating voltage.

F. Construction:
   1. Finish: Factory finish of baked enamel.
   2. Balanced Suppression Platform: Equally distribute surge current to metal oxide varistor (MOV) components to ensure equal stressing and maximum performance. Furnish surge suppression platform with equal impedance paths to each matched MOV.
   3. Internal Connections: Hardwired with connections using low impedance conductors and compression fittings.
   4. Safety and Diagnostic Monitoring: Equipped with standard overcurrent protection:
      a. Continuous monitoring of fusing system.
      b. Monitor individual MOV's (including neutral to ground). Capable of identifying open circuit failures not monitored by conventional fusing systems.
      c. Monitor for overheating in each mode due to thermal runaway.
      d. Furnish green and red solid state indicator light on each phase. Absence of green light and presence of red light indicates which phases have been damaged. Fault detection activates flashing trouble light. Units not capable of detecting open circuit damage, thermal conditions, and over current will not be accepted.
   5. Labeling: Permanently affix UL 1449 suppression voltage ratings and CSA to unit.

G. Rating:
   1. Electrical Noise Filter: Furnish each unit with high performance EMI/RFI noise rejection filter. Electric line noise attenuation no less than 45 dB at 100 kHz using MIL-STD-220A insertion loss test method.

H. Accessories:
   1. Digital display transient event counter with manual reset.
   2. Local audible alarm.
   3. Form C dry contacts one normally open (NO) and one normally closed (NC) for remote status monitoring.
   4. Remote monitor panel with indicating lights and audible alarm for mounting in remote location.
   5. Push-to-test feature.

I. Surge Current Capacity: Total surge current (based on 8 x 20 microsecond waveform) that device capable of surviving not less than:

Application	Min Surge Current Per Phase	Min Surge Current Per Mode *
Service Entrance (Switchboards, Switchgear, MCC)	250 kA	125 kA

High Exposure Roof Top Locations	160 kA	80 kA
Distribution and branch locations (Panelboards, MCC, Bus Duct)	120 kA	60 kA
*L-G, L-N and N-G (WYE system); L-L, L-G (Delta system)		

J. Protection Modes: For wye-configured system, furnish device with directly connected suppression elements between line-neutral (L-N), line-ground (L-G), and neutral-ground (N-G). For Delta configured system, furnish device with suppression elements between line to line (L-L) and line to ground (L-G).

K. Do not exceed following for maximum UL 1449 suppression voltage ratings:

Modes	208Y/120	480Y/277	600Y/347
WYE - L-N; L-G; N-G	400 V	800 V	1,200 V
Delta - L-L, L-G	800 V	1,500 V	2,000 V

L. ANSI/IEEE Catalog C3 Let Through Voltage: Based on ANSI/IEEE C62.41 and C62.45 recommended procedures for Catalog C3 surges (20 kV, 10kA) and not less than:

Modes	208Y/120	480Y/277	600Y/347
L-N	500 V	900 V	1,300 V

M. ANSI/IEEE Cat. B3 Let Through Voltage: Based on ANSI/IEEE C62.41 and C62.45 recommended procedures for ANSI/IEEE Catalog B3 Ringwave (6 kV, 500 amps) not less than:

Modes	208Y/120	480Y/277	600Y/347
WYE - L-N; L-G; N-G	400 V	800 V	1,200 V
L-N	170 V	300 V	470 V

2.2 SOURCE QUALITY CONTROL AND TESTS

A. Test units to specified surge ratings to ensure devices will achieve required life expectancy and reliability. Testing to full ratings also verifies internal construction quality of suppressors. Provide withstand testing for each mode and each phase basis.

B. Perform actual Let-Through voltage test data in form of oscillograph results for ANSI/IEEE C62.41 Catalog C3 (20 kV, 10 kA), Catalog C1 (6 kV, 3 kA), and Catalog. B3 (6 kV, 500 A at 100 kHz) tested according to ANSI/IEEE C62.45.

C. Perform spectrum analysis of each unit based on MIL-STD-220A test procedures between 50 kHz and 200 kHz verifying device noise attenuation exceeds 45 dB at 100 kHz.

D. Perform test verifying suppressors can survive published surge current rating for each mode and each phase basis. Test wave based on ANSI/IEEE C62.41, 8 x 20 microsecond current wave.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify mounting area is ready for equipment.

B. Verify circuit rough-ins are at correct location.

3.2 INSTALLATION

A. Install according to IEEE 1100.

B. Install service entrance suppressors in switchboard, switchgear.

C. Install distribution and branch suppressors in panelboards.

D. Install using direct bus bar connection.

E. Install indicator lights, trouble alarms, surge counter in face of switchboard, switchgear, or panelboard.

F. Install with maximum conductor length of 14 inches. Install suppressor with internal fusing.

G. Install Work according to UL standards.

END OF SECTION